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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/110,018	07/02/1998	MAKOTO SATOH	35.C12830	4203

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EXAMINER

WHIPKEY, JASON T

ART UNIT PAPER NUMBER

2612

DATE MAILED: 12/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/110,018	Applicant(s) SATO ET AL.	
	Examiner Jason T. Whipkey	Art Unit 2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 July 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,5,12,14,16,23,25 and 27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,5,12,14,16,23,25 and 27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 July 1998 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Response to Amendment

1. The translation of the foreign priority application was received July 14, 2004, and successfully overcomes the Anderson '535 reference. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn. A new ground of rejection follows.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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4. Claims 1, 3, 12, 14, 23, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuchta (U.S. Patent No. 5,164,831) in view of Bell (U.S. Patent No. 4,827,347) and further in view of Nakano (U.S. Patent No. 5,043,816).

Regarding **claim 1**, Kuchta discloses an image pickup apparatus (Figure 1A), comprising:

an image pickup device (sensor 12) adapted to pick up an image of an object to output an image signal (column 3, lines 47-52);

an image processing device (digital signal processor 22) adapted to process the image signal to generate first-resolution image data (a full-resolution image; see column 4, line 53) and second-resolution image data having a resolution which is not higher than that of the first-resolution image data (a thumbnail image; see column 4, lines 54-56);

a storage control device (file controller 40 in Figure 1B; see column 5, line 31) adapted to store, in a memory (memory card 24), the first- and second-resolution image data of image signals (column 5, lines 19-35) of a series of frames which are obtained by consecutively picking up the image of the object (image buffer 18 buffers a series of images captured too rapidly to process; see column 4, lines 42-50);

a display control device (processor 20) adapted to display the second-resolution image data on a display screen (display device 30; see column 4, lines 65-68); and

a compression encoding device (digital signal processor 22) adapted to compress (see column 5, lines 19-25) and encode (see column 5, lines 46-50), at a

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predetermined compression ratio (the compression process is shown in Figure 1B; it is inherent that a consistent process will result in a consistent compression ratio), the first-resolution image data.

Kuchta is silent with regard to displaying the series of frames immediately after they are picked up.

Bell discloses an electronic camera with a display of a plurality of images, as shown in Figure 1. In accordance with the flowchart shown in Figure 9, a captured image in step 407 results in the addition of the captured image to the display, which is performed by steps 411-413 (see column 7, lines 8-13). As long as the user does not change the camera's mode setting (see step 414), the process repeats for successive captured images.

An advantage to displaying images immediately after they're captured is that a user can select which images to retain (see column 1, lines 6-11) with minimal effort. For this reason, it would have been obvious at the time of invention to have Kuchta's camera display a series of captured images immediately after picking them up.

Kuchta is silent with regard to outputting a selected frame to a non-volatile memory.

Nakano discloses an electronic still camera that allows a user to select an image stored in temporary storage and transfer the image to non-volatile storage (column 22, lines 9-14).

An advantage to storing images in a temporary memory and transferring only selected images to non-volatile storage is that acceptable images may be stored for later use without wasting non-volatile storage space on unacceptable images. For this reason, it would have been obvious at the time of invention to have Kuchta's imaging device store captured images in temporary memory and transfer only acceptable images to a non-volatile memory.

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Regarding **claims 3, 14, and 25**, it is inherent that in Nakano's device a selected image is transmitted from temporary storage to the non-volatile storage.

Regarding **claim 12**, Kuchta discloses an image pickup method, comprising:

- a step of picking up an image of an object to output an image signal (column 3, lines 47-52);

- a step of processing the image signal (using digital signal processor 22) to generate first-resolution image data (a full-resolution image; see column 4, line 53) and second-resolution image data having a resolution which is not higher than that of the first-resolution image data (a thumbnail image; see column 4, lines 54-56);

- a first outputting step of outputting a designation signal so as to process image signals of a plurality of frames in said image processing step (as shown in Figure 1A, processor 20 controls all components of the camera);

- a storage step of storing the first- and second-resolution image data of the image signals (column 5, lines 19-35) of a series of frames which are obtained by picking up an image of the object in said picking up step (image buffer 18 buffers a series of images captured too rapidly to process; see column 4, lines 42-50);

- a step of displaying the second-resolution image data stored in said storage step (display device 30; see column 4, lines 65-68); and

- a step of compressing and encoding (see column 5, lines 19-25 and 46-50), at a predetermined compression ratio (the compression process is shown in Figure

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1B; it is inherent that a consistent process will result in a consistent compression ratio), the first-resolution image data of the series of frames.

Kuchta is silent with regard to displaying the series of frames immediately after they are picked up.

Bell discloses an electronic camera with a display of a plurality of images, as shown in Figure 1. In accordance with the flowchart shown in Figure 9, a captured image in step 407 results in the addition of the captured image to the display, which is performed by steps 411-413 (see column 7, lines 8-13). As long as the user does not change the camera's mode setting (see step 414), the process repeats for successive captured images.

An advantage to displaying images immediately after they're captured is that a user can select which images to retain (see column 1, lines 6-11) with minimal effort. For this reason, it would have been obvious at the time of invention to have Kuchta's camera display a series of captured images immediately after picking them up.

Kuchta is silent with regard to outputting a selected frame to a non-volatile memory.

Nakano discloses an electronic still camera that allows a user to select an image stored in temporary storage and transfer the image to non-volatile storage (column 22, lines 9-14).

An advantage to storing images in a temporary memory and transferring only selected images to non-volatile storage is that acceptable images may be stored for later use without wasting non-volatile storage space on unacceptable images. For this reason, it would have been obvious at the time of invention to have Kuchta's imaging device store captured images in temporary memory and transfer only acceptable images to a non-volatile memory.

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Claim 23 may be treated like claim 12. Additionally, Figure 1A shows that processor 20 controls all components of the camera. It is inherent that the processor stores instructions in some form.

5. Claims 5, 16, and 27 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Kuchta in view of Nakano and further in view of Yamagata (U.S. Patent No. 5,764,800).

Regarding **claims 5, 16, and 27**, Kuchta is silent with regard to compressing and encoding selected image data at varying compression ratio and storing this data in a memory.

Yamagata discloses an image data re-compression device. The user uses release button 16 to select an image to be recompressed (column 5, lines 27-33). Image data already stored on IC memory card M in Figure 2 in a low compression mode may be expanded and recompressed at a higher rate (column 5, line 63 through column 6, line 1). The recompressed image data are stored in memory M.

As stated in column 1, lines 39-42, this increases the recording efficiency of the memory. For this reason, it would have been obvious to have Kuchta's camera recompress stored images at a rate higher than the rate at which the image was originally stored.

Conclusion

6. Applicant's amendment filed on November 20, 2003, necessitated the new ground of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See

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MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Whipkey, whose telephone number is (703) 305-1819. The examiner can normally be reached Monday through Friday from 8:30 A.M. to 6:00 P.M. eastern standard time, alternating Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy Garber, can be reached on (703) 305-4929. The fax phone number for the organization where this application is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JTW

JTW

December 15, 2004


AUNG MOE
PRIMARY EXAMINER